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REMARKS

Claims 1-9, as amended, remain herein.

Applicants appreciate the statements in the Office Action that claims 4 and 5 would be allowable if rewritten in independent form to include all of the limitations of the independent claim(s) from which they depend.

Minor, editorial changes have been made in claims 1-9.

The specification has been edited to include headings.

1. Objections were stated to the drawings. Submitted herewith are copies of Figures 1-3 revised to replace wording in the French Language with corresponding English wording. Withdrawal of the objection to the drawings is respectfully requested.

2. The original Abstract has been amended.

3. Claims 1-9 were rejected under 35 U.S.C. §112, second paragraph. Claims 1-7 have been amended to moot the rejection.

Reconsideration and withdrawal of the rejection are respectfully requested.

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4. Claims 1-3 and 6-9 were allegedly rejected under 35 U.S.C. §102(b) "based upon a public use or sale of the invention." The Office Action does not cite any evidentiary basis or otherwise support this rejection in any way. Applicants' respectfully request reconsideration and withdrawal of the rejection.

6. Claims 1-3 and 6-9 were rejected under 35 U.S.C. §102(b) over Alvarez-Escurra et al. U.S. Patent 5,923,903.

The presently claimed method for programming an automation application program on an automation equipment programming station includes declaring symbolic input-output variables of the application program as an instance of a previously defined structured type object; configuring symbolic input-output variables of the application program comprising a definition of a physical location of each input-output module of such automation equipment associated with the symbolic input-output variables; and automatically interpreting the application program for execution on such automation equipment, comprising replacing the symbolic input-output variables with a complete topological address of the

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corresponding input-output information. This arrangement and corresponding method are nowhere disclosed or suggested in the cited reference.

The Office Action cites Alvarez-Escurra '903, column 2, lines 7-27 and Figs. 2B-7C, as allegedly disclosing declaring symbolic input-output variables of the application program as an instance of a previously defined structured type object, recited in applicants' claim 1. Actually column 2, lines 7-27 describes, and Figs. 2B-7C show the Alvarez-Escurra system as including a processing unit for carrying out exchanges with couplers each having a memory, wherein the processing unit memory contains objects related to each logical channel of such couplers that make up a data structure for which the contents are standardized, and such objects are exchanged with the coupler memory using a user program using an instruction set. The description "data structure for which the contents are standardized" is not the same as "declaring symbolic input-output variables of the application program as an instance of a previously defined structured type object," recited in applicants' claim 1. Alvarez-Escurra '903 discloses such "data structure" having "standardized contents" as being used by a user program using an instruction set. In

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contrast, applicants' claim 1 recites "declaring symbolic input-output variables of the application program." Accordingly, applicants' claim 1 differs from Alvarez-Escurra '903 in that the application comprises declaring symbolic input-output variables, while Alvarez-Escurra '903 describes merely standardized contents used by such application.

The Office Action cites Alvarez-Escurra '903, column 3, lines 13-42 and Figs. 2B-7C, as allegedly disclosing:

configuring symbolic input-output variables of the application program comprising a definition of a physical location of each input-output module of such automation equipment associated with the symbolic input-output variables;

Actually, Alvarez-Escurra '903, column 3, lines 13-42, describe a dialog between each coupler and the processing unit as structured by logical channels, which are characterized by function and by physical channels. Also described is a user program operating tasks within the processor utilizing information obtained from an inputs-outputs manager, and a data structure associated with each logical channel that is invariable regardless of the coupler and logical channel. Such "invariable" data structure merely refers to a constant data structure regardless of the manufacture/type of final automatic equipment for running the user program, and says

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nothing about configuring symbolic input-output variables of the application program. Also contrary to the Office Action, Alvarez-Escurra '903, column 5, lines 18-39, merely describes the configuration of a coupler in terms of a logical channel and specific job functions.

Accordingly, while Alvarez-Escurra '903 mentions an invariable data structure associated with each logical channel, and structures logical channels in terms of physical channels used by the coupler hosting the logical channels, nothing is mentioned about such structuring having anything to do with configuring symbolic input-output variables. Alvarez-Escurra '903 does not disclose anything about configuring symbolic input-output variables of the user/application program comprising a definition of a physical location of each input-output module of such automation equipment associated with the symbolic input-output variables, as recited in applicants' claim 1.

The Office Action cites Alvarez-Escurra '903, column 4, lines 35-57 and Figs. 2B-7C as allegedly disclosing automatically interpreting the application program for execution on the automation equipment, comprising replacing the symbolic input-output variables with a complete

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topological address of the corresponding input-output information. Actually, Alvarez-Escurra '903, column 4, lines 35-57 describes, and Figs. 2B-7C show a data structure associated with each logical channel of a coupler that is invariable regardless of the coupler and logical channel, which is not the same as replacing the symbolic input-output variables with a complete topological address of the corresponding input-output information, as recited in applicants' claim 1.

The Office Action cites Alvarez-Escurra '903, as allegedly disclosing an editor of symbolic variables for generating a configuration table stored in the memory means. However, as explained herein, Alvarez-Escurra '903 does not disclose generating and editing symbolic variables, or interpreting an application program comprising at least one symbolic variable.

For the foregoing reasons, Alvarez-Escurra '903 fails to disclose all elements of applicants' claimed invention, and therefore is not a proper basis for rejection under §102. And, there is no disclosure or teaching in Alvarez-Escurra '903 that would have suggested the desirability of modifying any portions thereof effectively to anticipate or suggest

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applicants' presently claimed invention. Claims 2-3 and 6, which depend from claim 1, are allowable for the same reasons explained herein for claim 1, and claims 8 and 9, which depend from claim 7, are allowable for the same reasons explained herein for claim 7. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

All claims 1-9 are now proper in form and patentably distinguished over all grounds of rejection stated in the Office Action. Accordingly, allowance of all claims 1-9 is respectfully requested.


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Should the Examiner deem that any further action by the applicants would be desirable to place this application in even better condition for issue, the Examiner is requested to telephone applicants' undersigned representatives.

Respectfully submitted,

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Date


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RWP:RNW/mhs

Attachment: 3 replacement sheets Figs. 1-3

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